



Super Powers

I can write and calculate powers.
I can calculate square and cube roots.



1) Match the square roots with their answers:

$\sqrt{16}$	3
$\sqrt{64}$	4
$\sqrt{9}$	9
$\sqrt{36}$	8
$\sqrt{81}$	6
$\sqrt{121}$	5
$\sqrt{49}$	11
$\sqrt{25}$	7

2) Calculate the answers:

a) $4^2 =$ _____

b) $10^3 =$ _____

c) $5^3 =$ _____

d) $7^3 =$ _____

e) $2^8 =$ _____

f) $3^6 =$ _____

g) $5^6 =$ _____

h) $6^4 =$ _____

Use a calculator to check and mark your answers.





Super Powers Answers

Question	Answer																								
1.	Match the square roots with their answers:																								
	<table border="1"><tbody><tr><td>$\sqrt{16}$</td><td></td><td>3</td></tr><tr><td>$\sqrt{64}$</td><td></td><td>4</td></tr><tr><td>$\sqrt{9}$</td><td></td><td>9</td></tr><tr><td>$\sqrt{36}$</td><td></td><td>8</td></tr><tr><td>$\sqrt{81}$</td><td></td><td>6</td></tr><tr><td>$\sqrt{121}$</td><td></td><td>5</td></tr><tr><td>$\sqrt{49}$</td><td></td><td>11</td></tr><tr><td>$\sqrt{25}$</td><td></td><td>7</td></tr></tbody></table>	$\sqrt{16}$		3	$\sqrt{64}$		4	$\sqrt{9}$		9	$\sqrt{36}$		8	$\sqrt{81}$		6	$\sqrt{121}$		5	$\sqrt{49}$		11	$\sqrt{25}$		7
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2.	Calculate the answers:																								
a	$4^2 = 16$																								
b	$10^3 = 1000$																								
c	$5^3 = 125$																								
d	$7^3 = 343$																								
e	$2^8 = 256$																								
f	$3^6 = 729$																								
g	$5^6 = 15\,625$																								
h	$6^4 = 1296$																								



Super Powers

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1) Use a calculator to work out these powers:

a) $9^4 =$ _____

b) $6^3 =$ _____

c) $25^3 =$ _____

d) $5^6 =$ _____

e) $15^2 =$ _____

f) $5^8 =$ _____

g) $8^4 =$ _____

h) $10^4 =$ _____



2) Work out these square roots. Use trial and improvement and a calculator if you need to.

a) $\sqrt{64} =$ _____

b) $\sqrt{81} =$ _____

c) $\sqrt{144} =$ _____

d) $\sqrt{121} =$ _____

e) $\sqrt{225} =$ _____

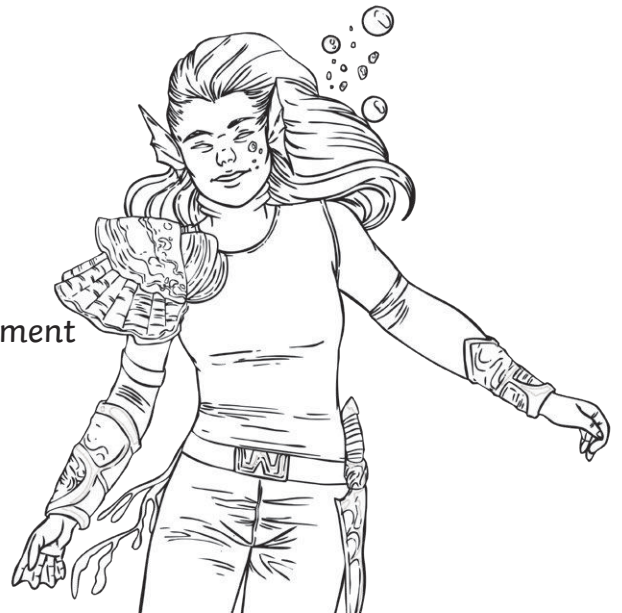
f) $\sqrt{289} =$ _____

g) $\sqrt{441} =$ _____

h) $\sqrt{900} =$ _____

i) $\sqrt{2500} =$ _____

j) $\sqrt{10\,000} =$ _____



3) Work out these cube roots. Use trial and improvement and a calculator if you need to.

a) $\sqrt[3]{125} =$ _____

b) $\sqrt[3]{3375} =$ _____

c) $\sqrt[3]{6859} =$ _____



Super Powers Answers

Question	Answer
1. Use a calculator to work out these powers:	
a	$9^4 = 6561$
b	$6^3 = 216$
c	$25^3 = 15625$
d	$5^6 = 15625$
e	$15^2 = 225$
f	$5^8 = 390625$
g	$8^4 = 4096$
h	$10^4 = 10000$
2. Work out these square roots. Use trial and improvement and a calculator if you need to.	
a	$\sqrt{64} = 8$
b	$\sqrt{81} = 9$
c	$\sqrt{144} = 12$
d	$\sqrt{121} = 11$
e	$\sqrt{225} = 15$
f	$\sqrt{289} = 17$
g	$\sqrt{441} = 21$
h	$\sqrt{900} = 30$

i	$\sqrt{2500} = 50$
j	$\sqrt{10000} = 100$
3. Work out these cube roots. Use trial and improvement and a calculator if you need to.	
a	$\sqrt[3]{125} = 5$
b	$\sqrt[3]{3375} = 15$
c	$\sqrt[3]{6859} = 19$



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1) Use a calculator to work out these powers:

a) $15^4 =$ _____

b) $19^3 =$ _____

c) $32^3 =$ _____

d) $6^6 =$ _____

e) $25^2 =$ _____

f) $5^8 =$ _____

g) $18^4 =$ _____

h) $100^4 =$ _____



2) Work out these square roots. Use trial and improvement and a calculator if you need to.

a) $\sqrt{169} =$ _____

b) $\sqrt{81} =$ _____

c) $\sqrt{144} =$ _____

d) $\sqrt{121} =$ _____

e) $\sqrt{576} =$ _____

f) $\sqrt{361} =$ _____

g) $\sqrt{529} =$ _____

h) $\sqrt{729} =$ _____

i) $\sqrt{1521} =$ _____

j) $\sqrt{2025} =$ _____



3) Work out these cube roots. Use trial and improvement and a calculator if you need to.

a) $\sqrt[3]{4096} =$ _____

b) $\sqrt[3]{13\ 824} =$ _____

c) $\sqrt[3]{1\ 000\ 000} =$ _____



Super Powers Answers

Question	Answer
1. Use a calculator to work out these powers:	
a	$15^4 = 50\ 625$
b	$19^3 = 6859$
c	$32^3 = 32\ 768$
d	$6^6 = 46\ 656$
e	$25^2 = 625$
f	$5^8 = 390\ 625$
g	$18^4 = 104\ 976$
h	$100^4 = 100\ 000\ 000$
2. Work out these square roots. Use trial and improvement and a calculator if you need to.	
a	$\sqrt{169} = 13$
b	$\sqrt{81} = 9$
c	$\sqrt{144} = 12$
d	$\sqrt{121} = 11$
e	$\sqrt{576} = 24$
f	$\sqrt{361} = 19$
g	$\sqrt{529} = 23$
h	$\sqrt{729} = 27$

i	$\sqrt{1521} = 39$
j	$\sqrt{2025} = 45$
3. Work out these cube roots. Use trial and improvement and a calculator if you need to.	
a	$\sqrt[3]{4096} = 16$
b	$\sqrt[3]{13\ 824} = 24$
c	$\sqrt[3]{1\ 000\ 000} = 100$